

WHAT IS CLAIMED IS:

1. A projection display device comprising:

a light source;

5 a display section configured to receive light from the light source and output image light modulated with an image signal;

a projection device configured to project the image light output from the display section;

10 a duct device having an air duct for conducting air from an air intake to an air discharge section and an air chamber which is formed downstream of the air discharge section in the air duct and configured to blow cooling air from the air discharge section toward the display section; and

15 an air blower configured to blow cooling air into the air intake.

2. A projection display device according to claim 1, wherein the display section is a light bulb.

20 3. A projection display device according to claim 1, wherein the display section comprises a liquid crystal light bulb and polarizing plates placed on input and output sides, respectively, of the liquid crystal light bulb.

25 4. A projection display device according to claim 1, wherein the air blower comprises a centrifugal fan which blows air through the air intake into the air duct.

5. A projection display device according to claim 1, wherein the air discharge section of the duct device has an input-side air outlet for discharging air toward the input side of the display section and an  
5 output-side air outlet for discharging air toward the output side of the display section.

6. A projection display device comprising:  
a light source;  
a separation section configured to separate light  
10 from the light source into a plurality of primary colors of light;  
a plurality of image display sections each of which is configured to receive a respective one of the primary colors of light and output image light  
15 modulated with an image signal corresponding to the respective one of the primary colors of light;  
a projection device configured to combine and project the image light from the display sections;  
a duct device having an air intake, a plurality of  
20 air discharge sections, and a plurality of air ducts for conducting air from the air intake to the air discharge sections, at least one of the air ducts having an air chamber formed downstream of the corresponding air discharge section, and configured to  
25 blow cooling air from the air discharge sections toward the display sections; and  
an air blower configured to blow cooling air into

the air intake.

7. A projection display device according to claim 6, wherein one of the air discharge sections is provided in parallel to the corresponding air duct, and the air chamber is formed downstream of the air discharge section provided in parallel with the corresponding air duct.

8. A projection display device according to claim 6, wherein the air chamber is formed downstream of the air discharge section which is the furthest from the air intake.

9. A projection display device according to claim 6, wherein each of the display sections is a light bulb.

10. A projection display device according to claim 6, wherein the display sections comprise red, green and blue liquid crystal light bulbs and polarizing plates placed on input and output sides of the respective liquid crystal light bulb.

11. A projection display device according to claim 6, wherein a plurality of air intakes are provided and the air blower is placed at each of the air intakes.

12. A projection display device according to claim 1, wherein the air blower comprises a centrifugal fan which blows air through the air intake into the air duct.

13. An air blowing device which blows cooling air against a part to be cooled comprising:

a duct device having an air duct for conducting air from an air intake to an air discharge section and  
5 an air chamber formed downstream of the air discharge section in the air duct and configured to blow cooling air from the air discharge section toward the part to be cooled; and

an air blower configured to blow cooling air into  
10 the air intake.

14. An air blowing device according to claim 13, wherein the air blower is a centrifugal fan.

15. An air blowing device according to claim 13, wherein the duct device has a plurality of air intakes,  
15 a plurality of air discharge sections configured to blow air against a plurality of parts to be cooled, and a plurality of air ducts configured to conduct air taken in from the air intakes to the air discharge sections.

20 16. An air blowing device according to claim 13, wherein one of the air discharge sections in the duct device is provided in parallel with the corresponding air duct, and the air chamber is formed downstream of the air discharge section provided in parallel with the  
25 corresponding air duct.

17. An air blowing device according to claim 13, wherein the air chamber is formed downstream of the air

discharge section which is the furthest from the air intake.